

## **INTERIM SOIL CLEANUP REPORT**

### **STATION HOUSE – TOWN OF LA CONNER ROW 315 MORRIS STREET LA CONNER, WASHINGTON**

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**ENVIRONMENTAL  
ENGINEERING GEOLOGY  
HYDROGEOLOGY**

La Conner Station House Restaurant  
(former gas stn) LUST 591712

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## LIST OF ABBREVIATIONS

AGE	Adept Geoscience & Environment
B	Benzene
bgs	below the ground surface
BTEX	Benzene, Toluene, Ethyl Benzene, Xylenes
E	Ethyl Benzene
EDB	Dibromoethane
EDC	Dichloromethane
EPA	Environmental Protection Agency
mg/kg	milligrams per kilogram (parts-per-million)
MTBE	Methyl Tertiary-Butyl Ether
MTCA	Model Toxics Control Act (WAC 173-340)
ND	Not Detected at Indicated Concentration
PAH	Polycyclic Aromatic Hydrocarbons
Pb	Lead
PCOC	Potential Contaminant of Concern
ppm	parts-per-million
cPAH	Carcinogenic Polycyclic Aromatic Hydrocarbons
ROW	Right of Way
T	Toluene
TEE	Terrestrial Ecological Evaluation
UST	Underground Storage Tank
VOV	Volatile Organic Compounds
X	Total Xylenes

## 1.0 INTRODUCTION

The purpose of this report is to describe the approach and tasks used to complete an interim cleanup of hydrocarbon contaminated soil discovered at the Station House and adjacent Town of La Conner right-of-way (ROW) following the removal of 4 abandoned underground storage tanks (USTs). This report was completed in general accordance with the reporting guidelines described in Model Toxics Control Act (MTCA, WAC 173-340).

Two underground storage tanks (USTs) were discovered by utility contactors within the ROW adjacent to 315 Morris Street in March, 2003. The 315 Morris Street property was formerly occupied by a variety of service stations from prior to 1930 until 1989. Adept Geoscience & Environment (AGE) was retained by Jerry and Donna Blades, former owners of the 315 Morris Street property, to complete a site assessment during the tank removal.

AGE completed a preliminary site visit on April 7, 2003 to inspect the two USTs. We collected two soil samples from adjacent to the tanks at depths of 1.5 to 2 feet below grade, and noted that the soil had a hydrocarbon odor. We also noted the presence of a third UST fill pipe.

The USTs were removed on April 9 and April 10, 2003 by Team Construction Services of Burlington, Washington. In addition to the three USTs known to be present, a fourth was discovered and removed at that time. The tanks ranged in size from approximately 550 gallons to 1,100 gallons. The upper part of tanks were observed to be in generally poor condition, and holes were observed in three of the four tanks.

Field screening with a photo-ionization detector during tank removal and the chemical results for the two samples collected on April 7 indicated that the soil within the UST pit contained gasoline and BTEX components in excess of the Method A cleanup levels defined in the Model Toxics Control Act. An interim soil cleanup was initiated immediately upon removal of the tanks, and was completed on May 10, 2003.

The interim soil cleanup was completed within an approximately 560 square-foot area. The excavation was advanced to depths ranging from approximately 6 feet to 9 feet below the ground surface (bgs). The water table was observed at a depth of 8.75 feet bgs. Analysis of soil samples collected from the floor and sidewalls of the excavation revealed that the residual concentration of contaminants on the west and north sidewalls, and the south part of the east sidewall, were below the target MTCA Method A cleanup levels. The residual concentration of contaminants on the floor of the excavation were also below the MTCA Method A cleanup levels, except for benzene. The residual concentration of contaminants on the north part of the east sidewall, and the south sidewall were above MTCA Method A cleanup levels.

## 1.1 Project Objectives

The objectives of this project were to remove contaminated soil from above the water table in order to reduce the threat to human health and the environment. The interim cleanup was limited to the area around the USTs, and did not extend beneath the adjacent road bed underlying Morris Street.

A secondary objective of the project was to collect information that may be used in the future development of a cleanup action plan.

## 2.0 PROJECT BACKGROUND

### 2.1 Project Location

A Vicinity Topographic Map is presented in Figure 1. The subject area lies within the Town of La Conner, at an elevation of approximately 5 feet above mean sea level. The site address is 315 Morris Street. The property is located within Skagit County in the NE quarter of Section 36, Township 34N, Range 2E.

The subject property was bounded to the east, west, and south by mixed use residential housing and commercial businesses adjacent to Morris Street, and to the north by residential housing. The location of the USTs relative to the existing building at 315 Morris Street is indicated on the site plans (Figure 2 and Figure 3) and in the site photographs.

### 2.2 Site History

Inspection of historic photographs indicates that the subject property was used as a service station from prior to 1930 until 1989 (Figure 4). The building shown in Figure 4 was destroyed by fire in the 1940's, and the existing building was constructed immediately over or very near the footprint of the former building.

The Washington State Department of Ecology's Site ID number for the Station House property is #6918, as indicated on the UST list dated March, 2003. The property is referred to as the La Conner Station on the UST list. The most recent configuration had USTs located west of the existing building (Figure 2). According to the UST List, these tanks were installed in 1964. According to the Blades, the tanks were removed in 1989. Although the UST list indicates that 5 tanks were removed, the Blades recall that only two tanks were removed.

The four USTs removed during the present project were part of an earlier configuration. At least two of the tanks were located at least in part within the City of La Conner right-of-way, underneath the sidewalk (Figure 2 and Figure 3).

No fuel dispensers were present at the time the tanks were removed. Distribution pipes extended from UST #1, UST #2, and UST#3, but the terminus of these pipes were not apparent to us at the time the tanks were removed. We did not observe the removal of UST #4. Based on old photographs of the service station dated 1929 and 1939 (Figure 4), the fuel dispensers appear to have been located east of the UST pit (Figure 2). The location of the pumps can be estimated based on the location of the home located east of 4<sup>TH</sup> Street, which still existed at the time this report was prepared. There appears to have been 2 pumps in 1929 and 3 pumps in 1939. A single pipe that may have been a distribution pipe extended from the UST pit in an easterly direction. An attempt was made to remove the pipe to determine its length, but the pipe could not be pulled free with an excavator.

Four vent pipes extended in a northerly direction from the UST pit (Figure 2), towards the existing building. According to Mr. Blades, some or all of the vent pipes extend to the building interior and vent through the ceiling. We inspected the attic of the building and found two possible vent pipes. The vent pipes were not removed.

UST #1 and UST #2 were both approximately 1,100 gallons in size. UST #3 and UST #4 comprised approximately 650 and 550 gallons, respectively.

### 2.3 Site Hydrogeology

Geologic and ground water conditions within the affected area were evaluated through visual inspection of the excavation floor and sidewalls, and by review of regional geologic mapping by Pessl and others (1989).

Based on these explorations and investigations, site soils were divided into three primary stratigraphic units, consisting from top (youngest) to bottom (oldest) of:

1. Imported fill soils;
2. Silty sand;
3. Sand.

The imported fill soils consisted of moderately compact, damp, permeable sandy gravel. These fill soils were present from the ground surface to a depth of 3 to 4 feet bgs. Fill soil beneath Morris Street also included crushed rock.

Native silty sand was encountered beneath the fill soil, extending to depths of approximately 8 to 9 feet bgs. The silty sand was generally soft and in a moist to wet condition. The silty sand was underlain by gray, poorly graded, fine grained sand. The sand was observed to be in a saturated condition.

Ground water was measured at a depth of approximately 8.75 feet below grade on April 9, 2003. The groundwater elevation was measured within one hour of a low tide measuring 0.1 feet at Port Townsend. Groundwater elevations beneath the subject property are subject to tidal influence, and it is our understanding that groundwater elevations rise to within a few feet of the ground surface during times of high tides.

## 2.4 Potential Contaminants of Concern

During a preliminary site visit on April 9, 2003 to inspect the USTs that were discovered in the ROW, we collected two soil samples for analysis. The samples were collected at depths of 1.5 to 2 feet below grade (3.209-1 and 3.209-2), and were analyzed for volatile and semi-volatile total petroleum hydrocarbons (gasoline, diesel, and oil); benzene, toluene, ethyl benzene, and xylenes (BTEX); and lead by CCI Analytical Laboratories of Everett, Washington. Volatile TPH and BTEX were analyzed using the NWTPH-GX and EPA 8021 methods, respectively. Semi-volatile TPH and lead were analyzed using the NWTPH-DX and EPA 6010 methods, respectively. The results are summarized in Table 1 and the complete laboratory report is included in Appendices of this report.

Gasoline range organics were detected at a concentration of 13,000 and 300 mg/kg in samples 3.209-1 and 3.209-2, respectively. Neither sample contained detectable concentrations of diesel or oil. Lead was detected at a concentration of 54 mg/kg in sample 3.209-1, and was not detected in sample 3.209-2.

Sample 3.209-1 contained relatively high concentrations of toluene, ethyl benzene, and total xylenes. Sample 3.209-2 contained low concentrations of toluene, ethyl benzene, and total xylenes. Benzene was not detected in either sample, but the detection limit for benzene exceeded the normal levels due to the high concentration of gasoline in both samples.

Based on these results, the potential contaminants of concern (PCOC) were identified as volatile TPH (gasoline) and BTEX.

## 2.5 Cleanup Level Goals

The maximum allowable contaminant levels in the State of Washington are defined in the Model Toxics Control Act (WAC 173-340), referred to as the MTCA. Applicable cleanup levels under MTCA can be developed using either conservative Method A tabulated values or using Method B risk-based formulations. Both Method A and Method B cleanup levels allow for unrestricted land use (i.e. residential use).

The goal of the interim cleanup was to restore the site for unrestricted land use. Method A soil cleanup levels were developed to address potential direct contact risks and groundwater protection concerns.

Volatile TPH and BTEX were identified as PCOC during the preliminary site visit. During the course of the interim cleanup, semi-volatile TPH (diesel and oil), methyl tertiary-butyl ether (MTBE), polycyclic aromatic hydrocarbons (PAH), and lead were also identified as PCOC. Using the tabulated values for Method A set forth in the MTCA (Table 740-1), cleanup levels were determined for soil at the subject property:

<b>Volatile TPH:</b>	100 mg/kg	Gasoline mixtures without benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture 100 mg/kg
	30 mg/kg	All other gasoline mixtures
<b>MTBE:</b>	0.1 mg/kg	
<b>Benzene:</b>	0.03 mg/kg	
<b>Toluene:</b>	7 mg/kg	
<b>Ethylbenzene:</b>	6 mg/kg	
<b>Total Xylenes:</b>	9 mg/kg	

Volatile TPH comprises gasoline mixtures and mineral spirits, which include benzene, methylbenzene, toluene, and xylenes (BTEX) and may include the additive methyl tertiary-butyl ether (MTBE).

**Semi-Volatile TPH:** 2,000 mg/kg

Semi-volatile TPH comprises diesel-range and oil-range hydrocarbon products.

**Total Carcinogenic PAH:** 0.1 mg/kg

The cleanup levels for separate PAH vary considerably. However, seven of the PAH compounds are considered to be more toxic than the others. Under Method A, the total combined concentration of these seven PAH cannot exceed 0.1 mg/kg.

**Lead:** 250 mg/kg

## 2.6 Terrestrial Ecological Evaluation

In accordance with WAC 173-340-7491(1)(c), a terrestrial ecological evaluation is not required, because there is less than 1.5 acres of contiguous undeveloped land on the site or within 500 feet of the site. A 500-foot radius is drawn around the site in Figure 1.

## 3.0 INTERIM REMEDIAL ACTION

Based on the chemical results for the samples collected on April 9, and on field estimates of residual TPH concentration using a photo-ionization detector, we were directed to initiate an interim cleanup immediately upon removal of the tanks. The interim soil cleanup consisted of the following tasks:

- UST removal and excavation of contaminated soil;
- Residual and excavated soil sampling;
- Chemical analysis and quality assurance; and
- Data validation

Each of these tasks is described in the sections that follow.

### 3.1 UST Removal and Soil Excavation

Soil excavation was completed concurrently with the removal of USTs by Team Construction Services of Burlington, Washington on April 9 and 10, 2003. Soil was loaded with an excavator direct into trucks for delivery to the Rinker Materials thermal desorption unit in Everett, Washington. The location of the tanks and the extents of the excavation are indicated on Figure 2.

A photo-ionization detector calibrated with 100 parts-per-million (ppm) isobutylene was periodically employed to estimate the residual concentration of hydrocarbons in soil, and to monitor the breathing zone.

The tank removal contractor pumped a total of approximately 25 gallons of an apparent water-hydrocarbon mixture from UST #1 and UST #2 prior to our arrival. UST #3 was dry. The tanks were inerted with dry ice. Each tank was removed following confirmation of an inert environment using an O<sub>2</sub> meter. UST #4 was discovered following removal of the first three tanks. The tank was full or nearly full of water, which began to pour from the tank into the adjacent excavation as soon as the east end of the tank was exposed. The tank removal contractor was of the opinion that the water was not contaminated, and the water was allowed to drain into

the excavation. We collected a sample of the water in a zip-lock bag and analyzed for headspace volatile organic compounds (VOC) using a photo-ionization detector. No VOC were detected. UST #4 was removed in the same manner as the initial three tanks. The tanks were cleaned by the removal contractor and were reportedly recycled at Skagit Steel.

Visual inspection revealed that the upper part of the tanks were highly corroded, pitted, and in generally poor condition, while the lower part of the tanks were in generally good condition (except UST #4). The upper part of the all of the tanks, except for UST #3, had holes ranging in size to several centimeters. UST #4 also had holes in the bottom of the tank.

The upper part of the tanks were bedded in moderately compact, damp, permeable sandy gravel fill soil. These fill soils were present from the ground surface to a depth of 3 to 4 feet bgs. The base of the tanks were bedded in native soil that consisted of moderately compact, damp to saturated, silt and silty sand. The base of the tanks was approximately 5 feet bgs. USTs bedded in gravelly soils are more susceptible to corrosion, which is consistent with our observation that the upper part of the tanks were much more corroded than the lower part.

A hydrocarbon odor emanated from the base and all sides of the excavation. Headspace field analysis of soil with a photo-ionization detector (PID) revealed VOC concentrations ranging from several hundred ppm to more than 2,000 ppm. However, no free product was observed at any time within the excavation.

A telephone utility trench bounded the south side of the UST pit at a depth of approximately 4 to 6 feet bgs, and was noted as a potential conduit. Two approximately 1-inch pipes extended in an easterly direction from the UST pit at a depth of approximately 6-inches to 1 foot (Figure 2). One pipe was reportedly an abandoned water pipe, the other was unidentified. A third unidentified pipe extended in a westerly direction from the UST pit at a depth of approximately 6-inches to 1 foot. The elevation of these pipes was generally above the elevation of contaminated soil and the water table, and thus these utilities did not appear to be potential conduits.

Obviously contaminated soil was loaded direct into trucks for transport to the Rinker Materials thermal desorption unit in Everett. The excavation was expanded in all directions away from the tanks. Based on field readings of headspace VOC using the PID, we were of the opinion that the cleanup level goals had likely been achieved on the floor of the excavation and on the west sidewall, north sidewall, and part of the east sidewall by the afternoon of April 10. Field readings indicated that the residual concentration of hydrocarbons likely exceeded the cleanup level goals on the north part of the east sidewall and on the south sidewall.

The interim soil cleanup excavation comprised a total area of approximately 560 square feet. The excavation ranged in depth from approximately 6 feet deep on the west and south sides to approximately 9

feet on the east side. Groundwater was observed seeping into the excavation at a depth of approximately 8.75 feet on April 9 within one hour of a 0.1 foot low tide measured at Port Townsend.

A total of 127 tons of contaminated soil was removed and delivered to Rinker Materials. A copy of the certificate of disposal is included in Appendix II. The excavation was backfilled with a combination of sandy gravel and crushed rock on April 10, 2003.

### **3.2 Soil Sampling**

Residual soil was the soil that remains in the excavation floor and sidewalls after the interim cleanup had been completed. The primary purpose of residual soil sampling was to determine if the residual concentration of PCOC were below the MTCA cleanup levels. Soil samples were collected using the following techniques:

1. Residual soil samples were collected by hand using disposable gloves. Samples were collected directly from the excavation floor and sidewalls. Excavated soil samples were collected from the excavator bucket by hand using disposable gloves.
2. Samples were placed in 8-ounce glass sample containers supplied by the laboratory. Each container was labeled with the site name, date, time, sample number, and the person collecting the sample. Sample containers were placed in a cooler with ice-substitute immediately after labeling.
3. Samples were refrigerated overnight and delivered to the analytical laboratory by our personnel the following day.

Seventeen residual soil samples and four samples of soil that was excavated and disposed were collected during the course of the interim cleanup.

### **3.3 Chemical Analysis & Quality Control**

Soil samples were analyzed by CCI Analytical Laboratories of Everett, Washington. All samples were analyzed for volatile TPH and BTEX. Selected samples were additionally analyzed for semi-volatile TPH, methyl tertiary-butyl ether (MTBE), dibromoethane (EDB), dichloromethane (EDC), polycyclic aromatic hydrocarbons (PAH), and lead.

The analytical methods are tabulated in Table 3.

### **3.4 Data Validation**

Analytical results were checked for completeness immediately upon receipt from the laboratory to ensure that data and QA/QC information

requested are present. Data quality was assessed by considering the following:

- Hold times
- Surrogate recovery
- Detection limits

All analyses were completed within the EPA recommended hold times.

The percent surrogate recovery was within acceptable limits, except that the surrogate was diluted out of calibration range for samples with high concentrations of gasoline (3.209-1, 3.209-5, 3.209-6, 3.209-7, 3.209-13, 3.209-16, 3.209-19, and 3.209-21).

Detection limits were at or below the MTCA Method A cleanup level for all samples and analytes except for benzene (samples 3.209-1, 3.209-2, 3.209-5, 3.209-12, 3.209-13, 3.209-19, 3.209-21) and MTBE (3.209-7, 3.209-13, 3.209-16, 3.209-19). As with the surrogate recovery, elevated detection limits were generally due to the high concentration of gasoline in the same sample.

In all cases except for sample 3.209-12, the degraded quality control was for soil samples from areas that were excavated and disposed, or from residual areas where gasoline (and less commonly BTEX components) clearly exceeded the MTCA Method A cleanup levels. Sample 3.209-12, a residual sample collected from the north sidewall of the excavation, had a detection limit of 0.04 mg/kg for benzene. This level is only 0.01 mg/kg above the MTCA Method A cleanup level, and gasoline and other BTEX components were not detected above acceptable detection limits. Thus, all data were determined useable as qualified for the purpose of this interim remedial action.

## 4.0 SOIL QUALITY RESULTS

Soil quality results are tabulated in Table 1 and Table 2. The complete laboratory reports are included in Appendix I. The location of each soil sample is indicated on Figure 3. Analytical methods are summarized in Table 3.

### 4.1 Residual Soil Quality

Volatile TPH and BTEX were not detected in five samples collected from the north and west sidewalls.

Volatile TPH was detected at a concentration of 6 mg/kg from a sample collected from the south part of the east sidewall (3.209-20). Semi-volatile TPH and BTEX were not detected.

Volatile and semi-volatile TPH were detected at concentrations of 710 mg/kg and 1,200 mg/kg, respectively, in residual soil on the north part of the east sidewall (Sample 3.209-21). Due to the suspected presence of oil, the sample was re-analyzed for PAH and was found to contain 0.39 mg/kg total cPAH.

Three samples collected from the south sidewall contained volatile TPH in concentrations ranging from 190 mg/kg to 990 mg/kg. BTEX was not detected, or was detected in concentrations below the Method A cleanup levels, except that benzene was detected at a concentration of 1.2 mg/kg in sample 3.209-16. All three samples were analyzed for semi-volatile TPH and none was detected.

A pilot hole was advanced by hand approximately 18 inches beyond the southern excavation limits into granular fill soils underlying Morris Street (sample 3.209-7). This sample contained volatile and semi-volatile TPH at concentrations of 3,200 mg/kg and 910 mg/kg, respectively, and benzene and ethyl benzene at concentrations of 3.5 mg/kg and 16 mg/kg, respectively. Toluene and xylenes were not detected. The sample also contained 2.23 mg/kg total cPAH and 2,500 mg/kg lead. Due to the unusually high lead concentration, the sample was re-analyzed for lead, and the concentration was confirmed.

We cannot estimate how far into Morris Street the contaminated soil extends with the presently available information. Generally, TPH contamination in soil extends for only a few feet beyond the source of contamination. Evidence for this generality can be seen in the present project, where contaminated soil extended for only a few feet away from the tanks on the west and north sidewalls. However, the mobility of contaminants and the extent of contamination can be greater in areas underlain by permeable soils, such as utility trench backfill soils and the granular soils observed under Morris Street, and in areas with a high water table as observed at the subject property.

Six samples were collected from the base of the excavation, including one sample from beneath each tank. Although volatile TPH was detected in four of the samples (5 mg/kg to 20 mg/kg), none of the samples exceeded the worst-case cleanup level of 30 mg/kg. BTEX was not detected, or was detected in concentrations below the Method A cleanup levels in four of the samples. Samples collected at a depth of 9 feet beneath UST #1 and UST#2 (3.209-9 and 3.209-10) contained benzene in concentrations that slightly exceeded the Method A cleanup level of 0.03 mg/kg (0.09 mg/kg and 0.07 mg/kg, respectively).

#### 4.2 Excavated Soil Quality

Four soil samples representative of the quality of excavated soil were collected (shaded entries in Table 1). The samples contained volatile TPH in concentrations ranging from 300 to 13,000 mg/kg. Benzene was not detected, but the detection limits were elevated due to the high concentration of gasoline. Toluene, ethyl benzene, and total xylenes

were detected in all of the samples and exceeded Method A cleanup levels in sample 3.209-1. All four samples were analyzed for semi-volatile TPH, which was detected only in the sample collected from the initial extent of the north part of the east sidewall (3.209-19, 197 mg/kg).

#### 4.3 Residual Saturation

When a petroleum hydrocarbon liquid is released to the soil, some of the liquid will be held in the soil pores or void spaces by capillary force. The concentration of petroleum hydrocarbon liquid in the soil under equilibrium conditions (i.e., the soil is saturated with liquid, but the liquid is not migrating downward) is called residual saturation. At concentrations above residual saturation, the hydrocarbon liquid will migrate downward due to gravity and capillary forces and may eventually reach and subsequently contaminate groundwater.

The default screening level residual saturation for volatile and semi-volatile TPH in coarse sand and gravelly soils is 1,000 mg/kg and 2,000 mg/kg (MTCA, Table 747-5), respectively. Based on the chemical results described above, these values were not exceeded in residual soil at the project site, except for the sample collected beneath Morris Street that contained 3,200 mg/kg volatile TPH. Although free product was not observed to seep from the south sidewall during the interim cleanup, it is possible that volatile TPH in that area may be present in concentrations high enough to allow downward migration.

#### 4.4 Potential for Groundwater Contamination

Groundwater was observed at a depth of 8.75 feet bgs on April 9, within a few hours of low tide. Groundwater elevations beneath the subject property are subject to tidal influence, and it is our understanding that groundwater elevations rise to within a few feet of the ground surface during times of high tides.

Contaminated soil extended as deep as approximately 9 feet below grade. Thus, it would appear that there is a potential for groundwater contamination.

### 5.0 SUMMARY AND CONCLUSIONS

This report has described UST removal and interim cleanup of hydrocarbon contaminated soil discovered at the Station House and adjacent Town of La Conner ROW at 315 Morris Street. Four USTs were removed on April 9 and April 10, 2003. Field screening with a photo-ionization detector indicated that the soil within the UST pit contained TPH in excess of the MTCA Method A cleanup levels, and an interim soil cleanup was initiated immediately upon removal of the tanks.

The interim soil cleanup was completed within an approximately 560 square-foot area. The excavation was advanced to depths ranging from approximately 6 feet to 9 feet below the ground surface (bgs). 127 tons of soil were remediated by thermal desorption at Rinker Materials in Everett, Washington.

Analysis of soil samples collected from the floor and sidewalls of the excavation revealed that the residual concentration of contaminants on the west and north sidewalls, and the south part of the east sidewall, were below the target MTCA Method A cleanup levels. The residual concentration of contaminants on the floor of the excavation were also below the MTCA Method A cleanup levels, except that two samples contained benzene that slightly exceeded the target cleanup levels.

The residual concentration of contaminants on the north part of the east sidewall, and the south sidewall were above MTCA Method A cleanup levels for gasoline and cPAH. The residual concentration of gasoline, benzene, cPAH and lead exceeded the Method A cleanup levels for soil in a pilot hole advanced approximately 18 inches under Morris Street.

Based on the depth to which contaminated soil was encountered (6 to 9 feet bgs), and given our understanding that the water table rises within a few feet of the ground surface during high tides, it is our opinion that there is a chance that groundwater may have been affected by the release. No groundwater samples were collected as part of this interim soil cleanup.

Although the residual concentration of PCOC exceeded Method A cleanup levels in some areas, the completion of work described in this report has resulted in a significant reduction in the volume and mass of contaminated soil.

## 5.1 Potential Receptors

Although soil with residual concentrations of contaminants exceeding the Method A cleanup levels remained in the south sidewall and north part of the east sidewall, the soil is currently underneath asphalt or concrete pavement, and does not present an immediate threat to biota, animals, or human health via direct contact. We understand that additional utility installations are planned for both sides of Morris Street. Thus, it is possible that more contaminated soil may be discovered during utility work on the north side of Morris Street, and it may be necessary to take minor steps to protect human health during soil removal activities (i.e. Level D personnel protection and 40-hour health and safety training for personnel that may come in contact with the soil). If discovered, contaminated soil may need to be disposed at a licensed facility.

Although it has not been confirmed, groundwater in the immediate vicinity of the subject property may contain PCOC at levels exceeding the Method A cleanup levels. However, according to the Town of La Conner Public Works Director, Gordy Bell, there are no drinking water wells within one-half mile of the subject property. Although long term goals may

include addressing potential groundwater quality issues, there does not appear to be a need for emergency action to protect existing drinking water sources.

The nearest environmental receptor is the Swinomish Channel, located approximately 830 feet west of the subject property. In our opinion, it is unlikely that this potentially sensitive receptor has been affected by the release on the subject property.

## 6.0 REFERENCES

Adept Geoscience & Environment, Inc., May 2003, UST Removal and Site Assessment, Station House – Town of La Conner ROW, La Conner, Washington.

Pessl, F., Jr., Dethier, D.P., Booth, D.B., and Minard, J.P., 1989, Surficial Geologic Map of the Port Townsend 30- by 60-Minute Quadrangle, Puget Sound Region, Washington, U.S. Geological Survey Map I-1198-F, scale 1:100,000.

United States Geological Survey, 1980, Anacortes South Quadrangle, 7.5 Minute Series (Topographic), Scale 1:24,000.

United States Geological Survey, 1973, La Conner Quadrangle, 7.5 Minute Series (Topographic), Scale 1:24,000.

Model Toxics Control Act Cleanup Regulation, WAC Chapter 173-340, 2001 Revision.

## 7.0 INDEMNIFICATION AND LIMITATIONS

The analytical results, conclusions and recommendations within this report are based on the soil samples collected from the indicated locations at the time this report was prepared, and should not be construed as a warranty of the subsurface conditions throughout the site. No environmental investigation can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. An environmental investigation is intended to reduce, but not eliminate, uncertainty regarding the existence of recognized environmental conditions.

AGE must be notified promptly should conditions other than those described in this report be discovered, such that we may modify our conclusions and recommendations as necessary.

Within the limitations of scope, schedule and budget for our work, we warrant that our work has been done in accordance with generally accepted environmental assessment practices followed in this area at the

May 19, 2003

Interim Soil Cleanup Report  
Station House – Town of La Conner ROW

time the report was prepared. No other warranty, express or implied, is made.

## 8.0 SIGNATURES

Questions and requests for additional information regarding this report should be directed to Jon Einarsen at (425) 353-9848 or toll-free (866) 353-9848.

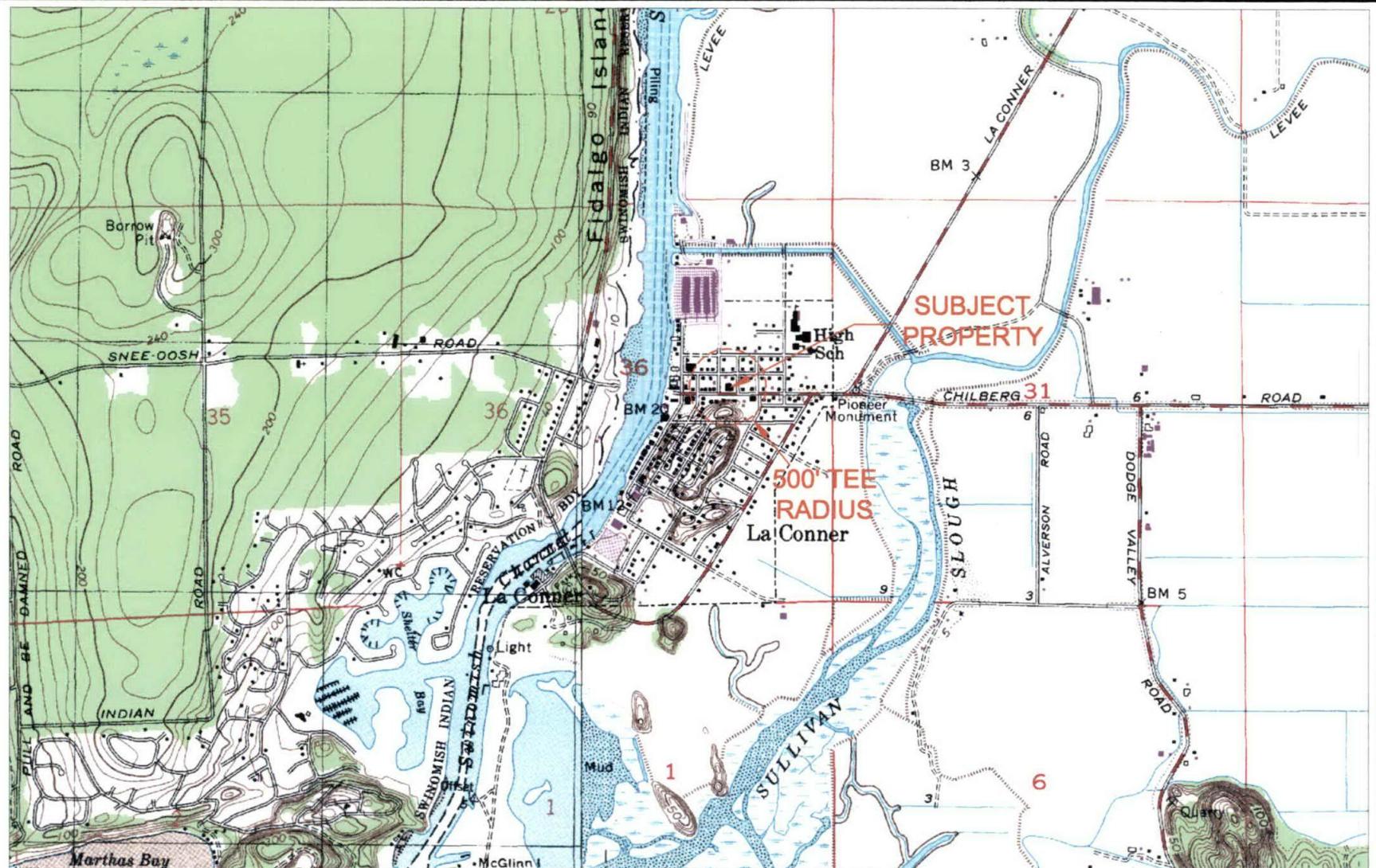
**ADEPT GEOSCIENCE & ENVIRONMENT, INC.**

Jon Einarsen

Jon Einarsen, Ph.D., PG  
President



Jon Marion Einarsen



GRAPHIC SCALE



( IN FEET )  
1 inch = 2000ft.

REFERENCE: ANACORTES SOUTH QUADRANGLE (U.S. GEOLOGICAL SURVEY, 1978, REVISED 1980)  
LA CONNER QUADRANGLE (U.S. GEOLOGICAL SURVEY, 1956, REVISED 1965, 1973)

ADEPT Geoscience & Environment

ENVIRONMENTAL  
ENGINEERING GEOLGY  
HYDROGEOLOGY

PHONE: (425) 353-9848

## VICINITY TOPOGRAPHIC MAP STATION HOUSE - LA CONNER ROW 315 MORRIS STREET LA CONNER, WASHINGTON

REFERENCE:  
JERRY BLADE'S

DATE: 05/03	SCALE: 1" = 2000'
DESIGNED BY: JME	REVISION #: 1
DRAWN BY: JME	FILENAME:

PROJECT NO.  
3.209

FIGURE NO.

1

CENTRE STREET

4TH STREET

MORRIS STREET



APPROXIMATE LOCATION  
OF USTS REMOVED IN  
1989

EXCAVATION LIMITS

TANKS

NOTE: ALL LOCATIONS AND SCALE ARE APPROXIMATE

GRAPHIC SCALE  
0 30 60  
1 INCH = 30 FEET

ADEPT Geoscience & Environment

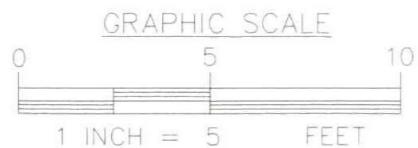
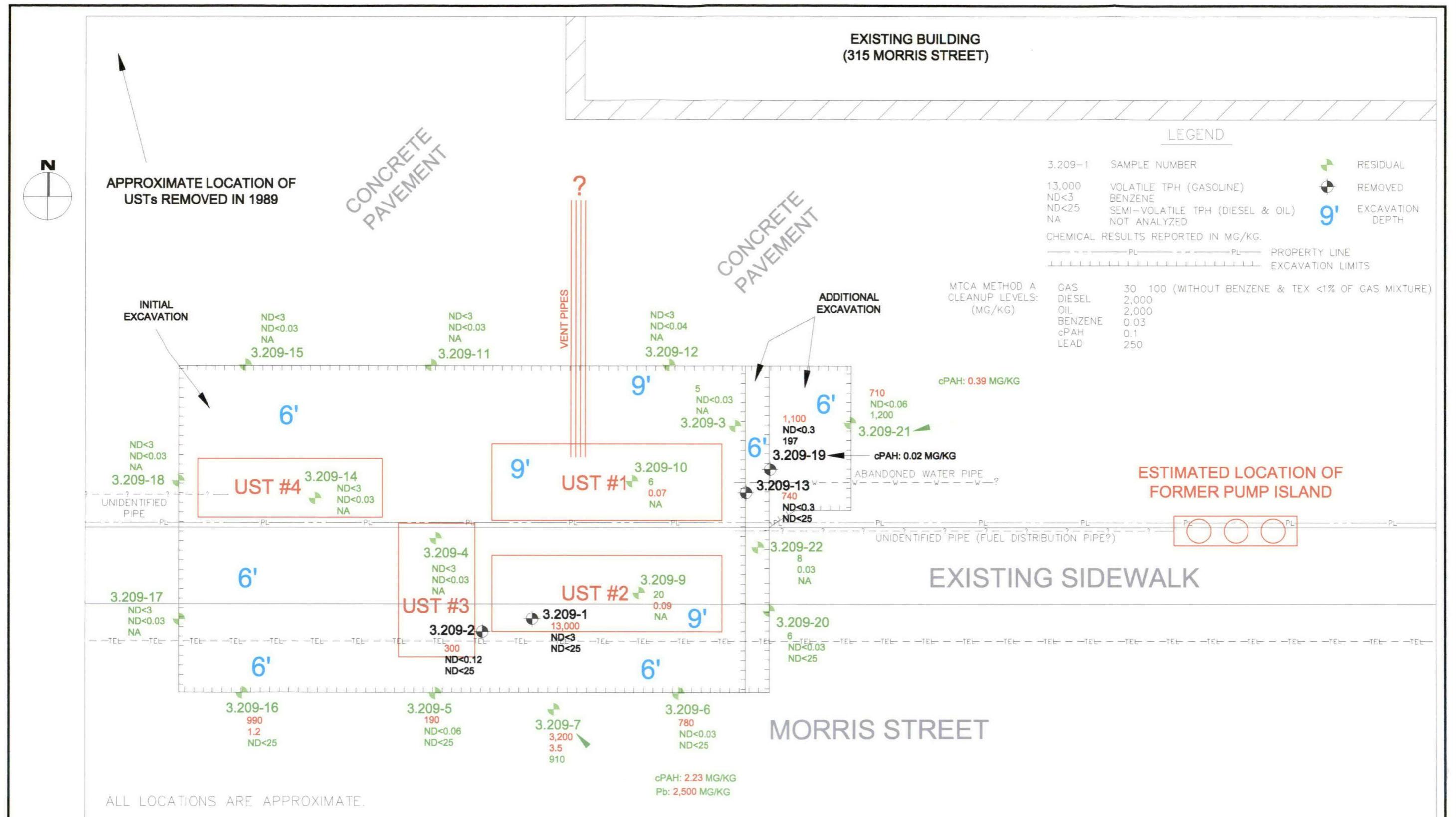
PHONE: (425) 353-9848

ENVIRONMENTAL  
ENGINEERING GEOLOGY  
HYDROGEOLOGY

**GENERALIZED SITE PLAN**  
STATION HOUSE - LA CONNER ROW  
315 MORRIS STREET  
LA CONNER, WASHINGTON

REFERENCE		PROJECT NO.
JERRY BLADES		3.209
DATE	SCALE	
05/03	1"=30'	
DESIGNED BY:	REVISION #	
JME	1	
DRAWN BY:	FILENAME	
JME	3.209-2	

FIGURE NO.
2



ALL LOCATIONS ARE APPROXIMATE.

ADEPT Geoscience & Environment

**PHONE: (425) 353-9848**

**SAMPLE LOCATIONS**  
STATION HOUSE - LA CONNER ROW  
315 MORRIS STREET  
LA CONNER, WASHINGTON

REFERENCE <b>JERRY BLADES</b>		PROJECT NO.
DATE <b>05/03</b>	SCALE <b>1" = 5'</b>	<b>3.209</b>
DESIGNED BY <b>JME</b>	REVISION # <b>2</b>	FIGURE NO.
DRAWN BY <b>JME</b>	FILENAME <b>3.209-2</b>	<b>3</b>



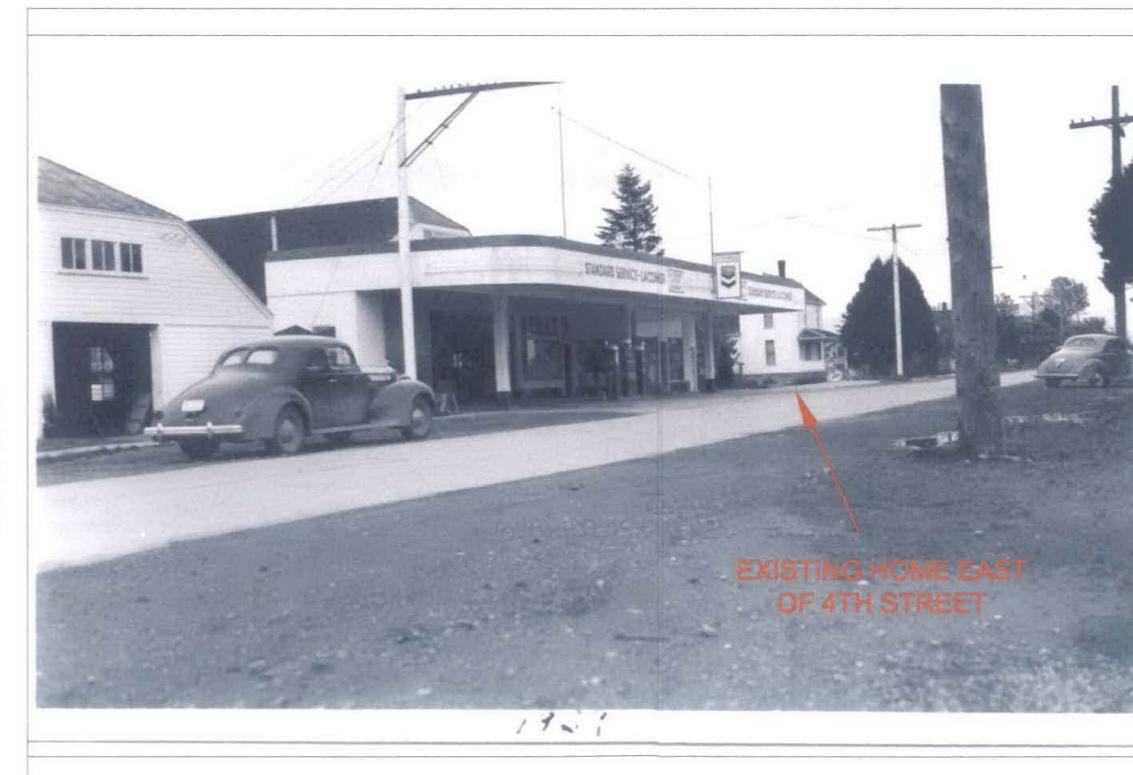
1939A



1939B



1929



1939C

ADEPT Geoscience & Environment

ENVIRONMENTAL  
ENGINEERING GEOLOGY  
HYDROGEOLOGY

PHONE: (425) 353-9848

**HISTORIC PHOTOGRAPHS**  
STATION HOUSE - LA CONNER ROW  
315 MORRIS STREET  
LA CONNER, WASHINGTON

REFERENCE:	JERRY BLADES	
DATE:	05/03	SCALE:
DESIGNED BY:	JME	REVISION #
DRAWN BY:	JME	FILENAME:

PROJECT NO.	3.209
FIGURE NO.	4

May 19, 2003

Interim Soil Cleanup Report  
The Station House – Town of LaConner ROW



Photo 1: View of the subject property looking northwest across Morris Street.



Photo 2: Utility alignment (strip of new asphalt) within ROW adjacent to 315 Morris Street where two USTs were discovered. View looking east.



Photo 3. Utility alignment, view looking west.



Photo 4. Removal of UST #1. The vent pipes can be seen in the central right part of the photo.



Photo 5. Removal of UST #2.



Photo 6. Removal of UST #3.



Photo 7. UST #4.



Photo 8: The lower half of the tanks (except UST #4) were observed to be in good condition, with only minor corrosion and pitting and no holes. The lower half of UST #4 was highly corroded and had holes.



Photo 9: The upper half of the USTs were observed to be highly corroded and pitted, with holes up to several centimeters in size.



Photo 10. Possible distribution pipe located on the east side of the UST pit, view looking east. The pipe could not be moved with the excavator.

Residual concentrations of potential contaminants were below the Method A cleanup levels on the south part of the east sidewall.



Photo 11. South wall of the excavation, view looking south. Residual concentrations of gasoline, benzene, cPAH, and lead exceeded Method A cleanup levels on this sidewall, beneath Morris Street.



Photo 12. North half of the east sidewall, view looking east. Residual concentrations of gasoline and cPAH exceeded Method A cleanup levels on this part of the sidewall.

Residual concentrations were below the Method A cleanup levels on the north sidewall (seen on the left side of the photo) and the west sidewall (not shown).

May 19, 2003

Interim Soil Cleanup Report  
The Station House – Town of LaConner ROW



Photo 13. Closer view of contaminated soil in the north part of the east sidewalk.



Photo 14. Initial load of backfill material consisting of crushed rock.



Photo 15. Completed backfill, view looking west.

**TABLE 1. Summarized Analytical Results**

Sample	Depth (Feet)	Location / Comments	Total cPAH (mg/kg)	TPH (mg/kg)			Volatile Organic Compounds (mg/kg)				Fuel Additives			Pb (mg/kg)	
				Gas	Diesel	Oil	B	T	E	X	MTBE (mg/kg)	EDB (µg/kg)	EDC (µg/kg)		
3.209-1	1.5	Top of UST #2 (Removed)		13,000	ND<25	ND<50	ND<3	37	68	900				54	
3.209-2	2	Between UST #2 & UST #3 (Removed)		300	ND<25	ND<50	ND<0.12	0.4	1.6	0.9				ND<9.2	
3.209-3	9	NE Corner – Floor (Residual)		5			ND<0.03	ND<0.05	ND<0.05	ND<0.2	0.3			ND<7.7	
3.209-4	8.75	Beneath UST #3 – Floor (Residual)		ND<3			ND<0.03	ND<0.05	ND<0.05	ND<0.2				ND<7.5	
3.209-5	4	South Wall – Adjacent UST #3 (Residual)		190	ND<25	ND<50	ND<0.06	0.7	2.2	2.1	0.3	ND<5	ND<10	ND<7.9	
3.209-6	4	South Wall – Adjacent UST #2 (Residual)		780	ND<25	ND<50	ND<0.03	1.4	5.6	3.4	ND<0.1	ND<5	ND<10	23	
3.209-7	3.5	Under Road 18" Beyond Excavation Limits (Residual)	2.23	3,200	910		3.5	ND<2.5	16	ND<10	ND<5	ND<5	ND<10	2,500	
3.209-9	9	Beneath UST #2 – Floor (Residual)		20			0.09	ND<0.05	0.4	0.8	ND<0.1			12	
3.209-10	9	Beneath UST #1 – Floor (Residual)		6			0.07	ND<0.05	ND<0.05	ND<0.2	ND<0.1			ND<8.2	
3.209-11	6	North Wall – Adjacent UST #3 (Residual)		ND<3			ND<0.03	ND<0.05	ND<0.05	ND<0.2	ND<0.1			ND<9.3	
3.209-12	6	North Wall – Adjacent UST #1 (Residual)		ND<3			ND<0.04	ND<0.06	ND<0.06	ND<0.2	ND<0.1			ND<10	
3.209-13	5.5	East Wall – Adjacent UST #1 (Removed)		740	ND<25	ND<50	ND<0.3	1.4	2.7	3.1	ND<1	ND<5	ND<10	ND<8.6	
3.209-14	6	Beneath UST #4 – Floor (Residual)		ND<3			ND<0.03	ND<0.05	ND<0.05	ND<0.2					
3.209-15	5	North Sidewall – Adjacent UST #4 (Residual)		ND<3			ND<0.03	ND<0.06	ND<0.06	ND<0.2					
MTCA Method A Cleanup Levels				0.10	100/30	2,000	2,000	0.03	7	6	9	0.1	5	20	250

ND: not detected at indicated concentration  
 mg/kg: milligrams per kilogram (parts-per-million)  
 B: benzene  
 T: toluene  
 E: ethyl benzene  
 X: total xylenes

MTBE: methyl tertiary-butyl ether  
 EDB: dibromoethane  
 EDC: dichloromethane  
 cPAH: carcinogenic polycyclic aromatic hydrocarbons  
 Pb: lead

Shading: soil removed

**TABLE 1. Summarized Analytical Results, Continued**

Sample	Depth (Feet)	Location / Comments	Total cPAH (mg/kg)	TPH (mg/kg)			Volatile Organic Compounds (mg/kg)				Fuel Additives			Pb (mg/kg)
				Gas	Diesel	Oil	B	T	E	X	MTBE (mg/kg)	EDB ( $\mu$ g/kg)	EDC ( $\mu$ g/kg)	
3.209-16	4	South Wall – Adjacent UST #4 (Residual)		990	ND<25	ND<50	1.2	2.1	4.9	5.6	ND<0.4	ND<5	ND<10	
3.209-17	5	West Wall – Adjacent UST #4 (Residual)		ND<3			ND<0.03	ND<0.06	ND<0.06	ND<0.2				
3.209-18	5	West Wall – Adjacent UST #4 (Residual)		ND<3			ND<0.03	ND<0.05	ND<0.05	ND<0.2				
3.209-19	4.5	East Wall (Removed)	0.02	1,100	120	77	ND<0.3	1.1	5.7	8.7	ND<1	ND<5	ND<10	
3.209-20	4.75	East Wall (Residual)		6	ND<25	ND<50	ND<0.03	ND<0.05	ND<0.05	ND<0.2				
3.209-21	4.75	East Wall (Residual)	0.39	710	460	740	ND<0.06	1.3	1.4	1.5	0.2	ND<5	ND<10	
3.209-22	6.5	Excavation Floor – East Side (Residual)		8			0.03	ND<0.05	ND<0.05	ND<0.2				
MTCA Method A Cleanup Levels			0.10	100/30	2,000	2,000	0.03	7	6	9	0.1	5	20	250

ND: not detected at indicated concentration  
 mg/kg: milligrams per kilogram (parts-per-million)  
 B: benzene  
 T: toluene  
 E: ethyl benzene  
 X: total xylenes

MTBE: methyl tertiary-butyl ether  
 EDB: dibromoethane  
 EDC: dichloromethane  
 cPAH: carcinogenic polycyclic aromatic hydrocarbons  
 Pb: lead

Shading: soil removed

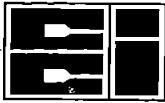
**TABLE 2. Analytical Results – PAH**

Sample Number	Polycyclic Aromatic Hydrocarbons (PAH) (mg/kg)																	
	Carcinogenic PAH							Other PAH										
	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Indeno[1,2,3-cd]pyrene	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i]perylene	Fluoranthene	Florene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
3.209-7	0.21	0.52	0.45	0.42	0.33	0.07	0.23	0.22	ND<0.02	0.06	0.31	0.31	0.14	20	37	9	0.30	0.67
3.209-19	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.03	2.7	4.2	0.67	0.11	0.02
3.209-21	0.02	0.06	0.13	0.07	0.08	ND<0.02	0.03	0.03	ND<0.02	0.05	0.05	0.08	0.07	5.4	1.5	0.85	0.22	0.11

ND: not detected above indicated concentration; mg/kg: milligrams per kilogram (parts-per-million)

**TABLE 3. Analytical Methods**

Total Petroleum Hydrocarbons			BTEX	Fuel Additives			PAH	Lead
Gas	Diesel	Oil	EPA-8021	MTBE	EDB	EDC	EPA-8270 SIM	EPA-6010
NWTPH-GX	NWTPH-DX			EPA-8021	EPA-8260			



CCI Analytical Laboratories, Inc.  
8620 Holly Drive  
Everett, WA 98208  
Phone (425) 356-2600  
(206) 292-9058 Seattle  
(425) 356-2626 Fax  
<http://www.ccilabs.com>

# Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

PROJECT ID:	3.209				
REPORT TO COMPANY:	Adept Seaview Open Encounters				
PROJECT MANAGER:	John Encounters				
ADDRESS:	P.O. Box 1228 Seattle, WA 98208				
PHONE:	425-353-7848 FAX: 425-353-8918				
P.O. NUMBER:	E-MAIL:				
INVOICE TO COMPANY:	Same				
ATTENTION:					
ADDRESS:					
	SAMPLE I.D.	DATE	TIME	TYPE	LAB
1.	3.209-1	4/7		2012	
2.	3.209-2	↓		↓	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

**ANALYSIS REQUESTED**

**SPECIAL INSTRUCTIONS**

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

**SIGNATURES (Name, Company, Date, Time):**

1. Relinquished By: John Eman /AGE/4-7-03/1211

Received By: Dr CCIAL 4.7.02 13

**2. Relinquished By:**

**TURNAROUND REQUESTED in Business Days\***

Organic, Metals & Inorganic Analysis

OTHER

10 5 3 2 1 SAME DAY

Specify: \_\_\_\_\_

## Fuels & Hydrocarbon Analysis

5 3 X SAME DAY

Re By: \_\_\_\_\_



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/16/03  
CCIL JOB #: 304017  
CCIL SAMPLE #: 1  
DATE RECEIVED: 4/7/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-1 4/7/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	13000	MG/KG	4/8/03	LAH
BENZENE	EPA-8021	ND(<3)	MG/KG	4/8/03	LAH
TOLUENE	EPA-8021	37	MG/KG	4/8/03	LAH
ETHYLBENZENE	EPA-8021	68	MG/KG	4/8/03	LAH
XYLEMES	EPA-8021	900	MG/KG	4/8/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	4/11/03	DLC
LEAD	EPA-6010	54	MG/KG	4/7/03	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 600 MG/KG  
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG  
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: O/L



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/16/03  
P.O. BOX 1328 CCIL JOB #: 304017  
EVERETT, WA 98206 CCIL SAMPLE #: 2  
DATE RECEIVED: 4/7/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-2 4/7/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	300	MG/KG	4/8/03	LAH
BENZENE	EPA-8021	ND(<0.12)	MG/KG	4/8/03	LAH
TOLUENE	EPA-8021	0.4	MG/KG	4/8/03	LAH
ETHYLBENZENE	EPA-8021	1.6	MG/KG	4/8/03	LAH
XYLENES	EPA-8021	0.9	MG/KG	4/8/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	4/11/03	DLC
LEAD	EPA-6010	ND(<9.2)	MG/KG	4/7/03	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 12 MG/KG

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: O/L



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/16/03  
CCIL JOB #: 304017

DATE RECEIVED: 4/7/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209

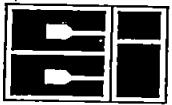
### QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
304017-01	NWTPH-GX	TFT	*
304017-01	EPA-8021	TFT	*
304017-01	NWTPH-DX	C25	146
304017-02	NWTPH-GX	TFT	103
304017-02	EPA-8021	TFT	87
304017-02	NWTPH-DX	C25	133

\* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: Al



CCI Analytical Laboratories, Inc.  
8620 Holly Drive  
Everett, WA 98208  
Phone (425) 356-2600  
(206) 292-9059 Seattle  
(425) 356-2626 Fax

## Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

(Laboratory Use Only)

4304030

Date 4-10-03 Page 1 Of 1

PROJECT ID:	3.209			
REPORT TO COMPANY:	Adept Seascience & Env			
PROJECT MANAGER:	Jon Einarsen			
ADDRESS:	PO Box 1328 Everett WA 98206-1328			
PHONE:	425-353-9848 FAX: 425-353-8918			
INVOICE TO COMPANY:	Same			
ATTENTION:				
ADDRESS:				
P.O. NUMBER	3.209 CCI QUOTE:			
SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. 3.209-3	4/9/03		SOIL	1
2. 3.209-4				2
3. 3.209-5				3
4. 3.209-6				4
5. 3.209-7				5
6. 3.209-9				6
7. 3.209-10				7
8. 3.209-11				8
9. 3.209-12				9
10. 3.209-13	↓		↓	11

SPECIAL INSTRUCTIONS ~~425-418-4951~~ 425-418-4951 Jon ct #

**SIGNATURES (Name, Company, Date, Time):**

1. Relinquished By: Jon Evans / AGE 4-10-03 / 0921

Received By: DR CCIAL 4/10/05 0921

2. Relinquished By: \_\_\_\_\_

**TURNAROUND REQUESTED in Business Days\***

## Organic, Metals & inorganic Analysis

**OTHER:**

Specify: \_\_\_\_\_

5 3 X SA





CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 1  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-3 4/9/03

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	5	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	0.3	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/10/03	LAH
LEAD	EPA-6010	ND(<7.7)	MG/KG	4/10/03	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CCIL



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 2  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-4 4/9/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/10/03	LAH
LEAD	EPA-6010	ND(<7.5)	MG/KG	4/10/03	RAB

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
 P.O. BOX 1328 CCIL JOB #: 304030  
 EVERETT, WA 98206 CCIL SAMPLE #: 3  
 DATE RECEIVED: 4/10/03  
 WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
 CLIENT SAMPLE ID: 3.209-5 4/9/03

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	190	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	0.3	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	ND(<0.06)	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	0.7	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	2.2	MG/KG	4/10/03	LAH
XYLEMES	EPA-8021	2.1	MG/KG	4/10/03	LAH
TPH-SEMOVOLATILE RANGE	NWTPH-DX	ND	MG/KG	4/10/03	DLC
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/10/03	DAT
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/10/03	DAT
LEAD	EPA-6010	ND(<7.9)	MG/KG	4/10/03	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: John



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 4  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-6 4/9/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	780	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	1.4	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	5.6	MG/KG	4/10/03	LAH
XYLENES	EPA-8021	3.4	MG/KG	4/10/03	LAH
TPH-SEMOVOLATILE RANGE	NWTPH-DX	ND	MG/KG	4/10/03	LAH
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/10/03	DAT
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/10/03	DAT
LEAD	EPA-6010	23	MG/KG	4/10/03	RAB

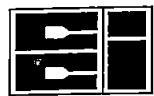
NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG  
DIESEL RANGE REPORTING LIMIT IS 26 MG/KG  
LUBE OIL RANGE REPORTING LIMIT IS 52 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CJN



CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 5  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-7 4/9/03

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	3200	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<5)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	3.5	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<2.5)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	16	MG/KG	4/10/03	LAH
XYLENES	EPA-8021	ND(<10)	MG/KG	4/10/03	LAH
TPH-SEMOVOLATILE RANGE	NWTPH-DX	910	MG/KG	4/10/03	LAH
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/10/03	DAT
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/10/03	DAT
LEAD	EPA-6010	2500	MG/KG	4/10/03	RAB

NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

AND LUBE OIL

DIESEL RANGE REPORTING LIMIT RAISED DUE TO OVERLAP FROM ADJACENT RANGES

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

DIESEL RANGE REPORTING LIMIT IS 250 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: John

**CERTIFICATE OF ANALYSIS**

**CLIENT:** ADEPT GEOSCIENCE & ENV DATE: 4/29/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 5  
  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

**CLIENT CONTACT:** JON EINARSEN

**CLIENT PROJECT ID:** 3.209  
**CLIENT SAMPLE ID:** 3.209-7 4/9/03

**REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS**
**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	3200	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<5)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	3.5	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<2.5)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	16	MG/KG	4/10/03	LAH
XYLENES	EPA-8021	ND(<10)	MG/KG	4/10/03	LAH
TPH-SEMOVOLATILE RANGE	NWTPH-DX	910	MG/KG	4/10/03	LAH
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/10/03	DAT
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/10/03	DAT
LEAD	EPA-6010	2500	MG/KG	4/10/03	RAB
NAPHTHALENE	EPA-8270 SIM	9.0	MG/KG	4/28/03	PDC
1-METHYLNAPHTHALENE	EPA-8270 SIM	20	MG/KG	4/28/03	PDC
2-METHYLNAPHTHALENE	EPA-8270 SIM	37	MG/KG	4/28/03	PDC
ACENAPHTHYLENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
ACENAPHTHENE	EPA-8270 SIM	0.22	MG/KG	4/28/03	PDC
FLUORENE	EPA-8270 SIM	0.14	MG/KG	4/28/03	PDC
PHENANTHRENE	EPA-8270 SIM	0.30	MG/KG	4/28/03	PDC
ANTHRACENE	EPA-8270 SIM	0.06	MG/KG	4/28/03	PDC
FLUORANTHENE	EPA-8270 SIM	0.31	MG/KG	4/28/03	PDC
PYRENE	EPA-8270 SIM	0.67	MG/KG	4/28/03	PDC
BENZO[A]ANTHRACENE	EPA-8270 SIM	0.21	MG/KG	4/28/03	PDC
CHRYSENE	EPA-8270 SIM	0.33	MG/KG	4/28/03	PDC
BENZO[B]FLUORANTHENE	EPA-8270 SIM	0.45	MG/KG	4/28/03	PDC
BENZO[K]FLUORANTHENE	EPA-8270 SIM	0.42	MG/KG	4/28/03	PDC
BENZO(A)PYRENE	EPA-8270 SIM	0.52	MG/KG	4/28/03	PDC
INDENO[1,2,3-CD]PYRENE	EPA-8270 SIM	0.23	MG/KG	4/28/03	PDC
DIBENZ[A,H]ANTHRACENE	EPA-8270 SIM	0.07	MG/KG	4/28/03	PDC



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/29/03  
CCIL JOB #: 304030  
CCIL SAMPLE #: 5  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-7 4/9/03

### REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS

### DATA RESULTS

			ANALYSIS	ANALYSIS
BENZO[G,H,I]PERYLENE	EPA-8270 SIM	0.31	MG/KG	4/28/03 PDC

NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE AND LUBE OIL  
DIESEL RANGE REPORTING LIMIT RAISED DUE TO OVERLAP FROM ADJACENT RANGES

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

DIESEL RANGE REPORTING LIMIT IS 250 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: Jon



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 6  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-9 4/9/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	20	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	0.09	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	0.4	MG/KG	4/10/03	LAH
XYLEMES	EPA-8021	0.8	MG/KG	4/10/03	LAH
LEAD	EPA-6010	12	MG/KG	4/10/03	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 6 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CDL



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 7  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-10 4/9/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	6	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	0.07	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/10/03	LAH
LEAD	EPA-6010	ND(<8.2)	MG/KG	4/10/03	RAB

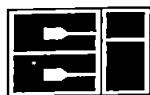
NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CCIL



CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 8  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-11 4/9/03

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/10/03	LAH
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/10/03	LAH
LEAD	EPA-6010	ND(<9.3)	MG/KG	4/10/03	RAB

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 9  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-12 4/9/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	ND(<0.04)	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	ND(<0.06)	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.06)	MG/KG	4/10/03	LAH
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/10/03	LAH
LEAD	EPA-6010	ND(<10)	MG/KG	4/10/03	RAB

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 4 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY:  \_\_\_\_\_



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**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/11/03  
P.O. BOX 1328 CCIL JOB #: 304030  
EVERETT, WA 98206 CCIL SAMPLE #: 10  
DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-13 4/9/03

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	740	MG/KG	4/10/03	LAH
MTBE***	EPA-8021	ND(<1)	MG/KG	4/10/03	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	4/10/03	LAH
TOLUENE	EPA-8021	1.4	MG/KG	4/10/03	LAH
ETHYLBENZENE	EPA-8021	2.7	MG/KG	4/10/03	LAH
XYLEMES	EPA-8021	3.1	MG/KG	4/10/03	LAH
TPH-SEMOVOLATILE RANGE	NWTPH-DX	ND	MG/KG	4/10/03	LAH
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/10/03	DAT
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/10/03	DAT
LEAD	EPA-6010	ND(<8.6)	MG/KG	4/10/03	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 1  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-14 4/10/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/14/03	DAT
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/14/03	DAT
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/14/03	DAT

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 2  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-15 4/10/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/14/03	DAT
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/14/03	DAT
TOLUENE	EPA-8021	ND(<0.06)	MG/KG	4/14/03	DAT
ETHYLBENZENE	EPA-8021	ND(<0.06)	MG/KG	4/14/03	DAT
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/14/03	DAT

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: J. Bay



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 3  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-16 4/10/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	990	MG/KG	4/16/03	DAT
MTBE***	EPA-8021	ND(<0.4)	MG/KG	4/15/03	DAT
BENZENE	EPA-8021	1.2	MG/KG	4/15/03	DAT
TOLUENE	EPA-8021	2.1	MG/KG	4/15/03	DAT
ETHYLBENZENE	EPA-8021	4.9	MG/KG	4/15/03	DAT
XYLEMES	EPA-8021	5.6	MG/KG	4/15/03	DAT
TPH-SEMOVOLATILE RANGE	NWTPH-DX	ND	MG/KG	4/16/03	DLC
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/14/03	DAT
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/14/03	DAT

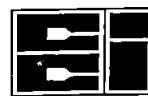
NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG  
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG  
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 



CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/18/03  
CCIL JOB #: 304037  
CCIL SAMPLE #: 4  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-17 4/10/03

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/14/03	DAT
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/14/03	DAT
TOLUENE	EPA-8021	ND(<0.06)	MG/KG	4/14/03	DAT
ETHYLBENZENE	EPA-8021	ND(<0.06)	MG/KG	4/14/03	DAT
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/14/03	DAT

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: J. Bay



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 5  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-18 4/10/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/14/03	DAT
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/14/03	DAT
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/14/03	DAT

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

**CERTIFICATE OF ANALYSIS**

**CLIENT:** ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 6  
  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

**CLIENT CONTACT:** JON EINARSEN

**CLIENT PROJECT ID:** 3.209  
**CLIENT SAMPLE ID:** 3.209-19 4/10/03

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	1100	MG/KG	4/15/03	DAT
MTBE***	EPA-8021	ND(<1)	MG/KG	4/15/03	DAT
BENZENE	EPA-8021	ND(<0.3)	MG/KG	4/15/03	DAT
TOLUENE	EPA-8021	1.1	MG/KG	4/15/03	DAT
ETHYLBENZENE	EPA-8021	5.7	MG/KG	4/15/03	DAT
XYLENES	EPA-8021	8.7	MG/KG	4/15/03	DAT
TPH-DIESEL RANGE	NWTPH-DX	120	MG/KG	4/16/03	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	77	MG/KG	4/16/03	DLC
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/14/03	PDC
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/14/03	PDC

**NOTE:** CHROMATOGRAM INDICATES SAMPLE CONTAINS HIGHLY WEATHERED GASOLINE, LATE DIESEL RANGE PRODUCT, AND LUBE OIL

\*\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG  
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG  
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY:



**CERTIFICATE OF ANALYSIS**

**CLIENT:** ADEPT GEOSCIENCE & ENV DATE: 4/29/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 6  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

**CLIENT CONTACT:** JON EINARSEN

**CLIENT PROJECT ID:** 3.209  
**CLIENT SAMPLE ID:** 3.209-19 4/10/03

**REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS**
**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1100	MG/KG	4/15/03	DAT
MTBE***	EPA-8021	ND(<1)	MG/KG	4/15/03	DAT
BENZENE	EPA-8021	ND(<0.3)	MG/KG	4/15/03	DAT
TOLUENE	EPA-8021	1.1	MG/KG	4/15/03	DAT
ETHYLBENZENE	EPA-8021	5.7	MG/KG	4/15/03	DAT
XYLEMES	EPA-8021	8.7	MG/KG	4/15/03	DAT
TPH-DIESEL RANGE	NWTPH-DX	120	MG/KG	4/16/03	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	77	MG/KG	4/16/03	DLC
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/14/03	PDC
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/14/03	PDC
NAPHTHALENE	EPA-8270 SIM	0.67	MG/KG	4/28/03	PDC
1-METHYLNAPHTHALENE	EPA-8270 SIM	2.7	MG/KG	4/28/03	PDC
2-METHYLNAPHTHALENE	EPA-8270 SIM	4.2	MG/KG	4/28/03	PDC
ACENAPHTHYLENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
ACENAPHTHENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
FLUORENE	EPA-8270 SIM	0.03	MG/KG	4/28/03	PDC
PHENANTHRENE	EPA-8270 SIM	0.11	MG/KG	4/28/03	PDC
ANTHRACENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
FLUORANTHENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
PYRENE	EPA-8270 SIM	0.02	MG/KG	4/28/03	PDC
BENZO[A]ANTHRACENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
CHRYSENE	EPA-8270 SIM	0.02	MG/KG	4/28/03	PDC
BENZO[BJ]FLUORANTHENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
BENZO[KJ]FLUORANTHENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
BENZO(A)PYRENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
INDENO[1,2,3-CD]PYRENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
DIBENZ[A,H]ANTHRACENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
BENZO[G,H,I]PERYLENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/29/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 6  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-19 4/10/03

### REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
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NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS HIGHLY WEATHERED GASOLINE, LATE DIESEL RANGE PRODUCT, AND LUBE OIL

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG  
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG  
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CCIL



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 7  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-20 4/10/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	6	MG/KG	4/14/03	DAT
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/14/03	DAT
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/14/03	DAT

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: J. Bay



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/29/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 7  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-20 4/10/03

### REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETER

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	6	MG/KG	4/14/03	DAT
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/14/03	DAT
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/14/03	DAT
TPH-SEMOVOLATILE RANGE	NWTPH-DX	ND	MG/KG	4/23/03	DAT

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:  \_\_\_\_\_



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 8  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-21 4/10/03

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	710	MG/KG	4/15/03	DAT
MTBE***	EPA-8021	0.2	MG/KG	4/15/03	DAT
BENZENE	EPA-8021	ND(<0.06)	MG/KG	4/15/03	DAT
TOLUENE	EPA-8021	1.3	MG/KG	4/15/03	DAT
ETHYLBENZENE	EPA-8021	1.4	MG/KG	4/15/03	DAT
XYLEMES	EPA-8021	1.5	MG/KG	4/15/03	DAT
TPH-DIESEL RANGE	NWTPH-DX	460	MG/KG	4/16/03	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	740	MG/KG	4/16/03	DLC
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/14/03	PDC
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/14/03	PDC

NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS HIGHLY WEATHERED GASOLINE, LATE DIESEL RANGE PRODUCT, AND LUBE OIL  
DIESEL RESULT MAY BE BIASED HIGH DUE TO VOLATILE RANGE OVERLAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

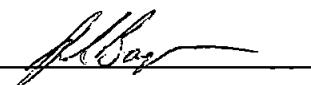
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/29/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 8  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-21 4/10/03

### REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	710	MG/KG	4/15/03	DAT
MTBE***	EPA-8021	0.2	MG/KG	4/15/03	DAT
BENZENE	EPA-8021	ND(<0.06)	MG/KG	4/15/03	DAT
TOLUENE	EPA-8021	1.3	MG/KG	4/15/03	DAT
ETHYLBENZENE	EPA-8021	1.4	MG/KG	4/15/03	DAT
XYLEMES	EPA-8021	1.5	MG/KG	4/15/03	DAT
TPH-DIESEL RANGE	NWTPH-DX	460	MG/KG	4/16/03	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	740	MG/KG	4/16/03	DLC
1,2-DICHLOROETHANE	EPA-8260	ND(<10)	UG/KG	4/14/03	PDC
1,2-DIBROMOETHANE	EPA-8260	ND(<5)	UG/KG	4/14/03	PDC
NAPHTHALENE	EPA-8270 SIM	0.85	MG/KG	4/28/03	PDC
1-METHYLNAPHTHALENE	EPA-8270 SIM	5.4	MG/KG	4/28/03	PDC
2-METHYLNAPHTHALENE	EPA-8270 SIM	1.5	MG/KG	4/28/03	PDC
ACENAPHTHYLENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
ACENAPHTHENE	EPA-8270 SIM	0.03	MG/KG	4/28/03	PDC
FLUORENE	EPA-8270 SIM	0.07	MG/KG	4/28/03	PDC
PHENANTHRENE	EPA-8270 SIM	0.22	MG/KG	4/28/03	PDC
ANTHRACENE	EPA-8270 SIM	0.05	MG/KG	4/28/03	PDC
FLUORANTHENE	EPA-8270 SIM	0.08	MG/KG	4/28/03	PDC
PYRENE	EPA-8270 SIM	0.11	MG/KG	4/28/03	PDC
BENZO[A]ANTHRACENE	EPA-8270 SIM	0.02	MG/KG	4/28/03	PDC
CHRYSENE	EPA-8270 SIM	0.08	MG/KG	4/28/03	PDC
BENZO[B]FLUORANTHENE	EPA-8270 SIM	0.13	MG/KG	4/28/03	PDC
BENZO[K]FLUORANTHENE	EPA-8270 SIM	0.07	MG/KG	4/28/03	PDC
BENZO(A)PYRENE	EPA-8270 SIM	0.06	MG/KG	4/28/03	PDC
INDENO[1,2,3-CD]PYRENE	EPA-8270 SIM	0.03	MG/KG	4/28/03	PDC
DIBENZ[A,H]ANTHRACENE	EPA-8270 SIM	ND(<0.02)	MG/KG	4/28/03	PDC
BENZO[G,H,I]PERYLENE	EPA-8270 SIM	0.05	MG/KG	4/28/03	PDC



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/29/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 8  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-21 4/10/03

### REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
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NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS HIGHLY WEATHERED GASOLINE, LATE DIESEL RANGE PRODUCT, AND LUBE OIL  
DIESEL RESULT MAY BE BIASED HIGH DUE TO VOLATILE RANGE OVERLAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY:  \_\_\_\_\_



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV DATE: 4/18/03  
P.O. BOX 1328 CCIL JOB #: 304037  
EVERETT, WA 98206 CCIL SAMPLE #: 9  
DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209  
CLIENT SAMPLE ID: 3.209-22 4/10/03

### DATA RESULTS

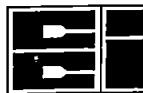
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	8	MG/KG	4/14/03	DAT
BENZENE	EPA-8021	0.03	MG/KG	4/14/03	DAT
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/14/03	DAT
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/14/03	DAT

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 



CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/18/03  
CCIL JOB #: 304037

DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209

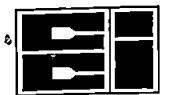
**QUALITY CONTROL RESULTS**

**SURROGATE RECOVERY**

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
304037-01	NWTPH-GX	TFT	80
304037-01	EPA-8021	TFT	83
304037-02	NWTPH-GX	TFT	71
304037-02	EPA-8021	TFT	74
304037-03	NWTPH-GX	TFT	*
304037-03	EPA-8021	TFT	121
304037-03	NWTPH-DX	C25	101
304037-03	EPA-8260	1,2-DCE-d4	99
304037-04	NWTPH-GX	TFT	85
304037-04	EPA-8021	TFT	87
304037-05	NWTPH-GX	TFT	63
304037-05	EPA-8021	TFT	65
304037-06	NWTPH-GX	TFT	*
304037-06	EPA-8021	TFT	*
304037-06	NWTPH-DX	C25	99
304037-06	EPA-8260	1,2-DCE-d4	82
304037-07	NWTPH-GX	TFT	69
304037-07	EPA-8021	TFT	72
304037-08	NWTPH-GX	TFT	*
304037-08	EPA-8021	TFT	115
304037-08	NWTPH-DX	C25	116
304037-08	EPA-8260	1,2-DCE-d4	73
304037-09	NWTPH-GX	TFT	85
304037-09	EPA-8021	TFT	86

\* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:



CCI  
ANALYTICAL  
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/11/03  
CCIL JOB #: 304030

DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209

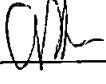
QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
304030-01	NWTPH-GX	TFT	69
304030-01	EPA-8021	TFT	69
304030-02	NWTPH-GX	TFT	77
304030-02	EPA-8021	TFT	75
304030-03	NWTPH-GX	TFT	*
304030-03	EPA-8021	TFT	142
304030-03	NWTPH-DX	C25	129
304030-03	EPA-8260	1,2-DCE-d4	93
304030-04	NWTPH-GX	TFT	*
304030-04	EPA-8021	TFT	*
304030-04	NWTPH-DX	C25	141
304030-04	EPA-8260	1,2-DCE-d4	82
304030-05	NWTPH-GX	TFT	*
304030-05	EPA-8021	TFT	*
304030-05	NWTPH-DX	C25	126
304030-05	EPA-8260	1,2-DCE-d4	363**
304030-06	NWTPH-GX	TFT	60
304030-06	EPA-8021	TFT	67
304030-06 (MTBE,BENZENE,TOLUENE)	EPA-8021	TFT	71
304030-07	NWTPH-GX	TFT	82
304030-07	EPA-8021	TFT	84
304030-08	NWTPH-GX	TFT	76
304030-08	EPA-8021	TFT	74
304030-09	NWTPH-GX	TFT	71
304030-09	EPA-8021	TFT	66
304030-10	NWTPH-GX	TFT	*
304030-10	EPA-8021	TFT	*
304030-10	NWTPH-DX	C25	103
304030-10	EPA-8260	1,2-DCE-d4	76

\* SURROGATE DILUTED OUT OF CALIBRATION RANGE

\*\* SURROGATE OUTSIDE OF CONTROL LIMITS OF 70-120% DUE TO MATRIX INTERFERENCE

APPROVED BY: 



### CERTIFICATE OF ANALYSIS

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/29/03  
CCIL JOB #: 304030

DATE RECEIVED: 4/10/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209

### REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS

### QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR. ID	% RECV
304030-01	NWTPH-GX	TFT	69
304030-01	EPA-8021	TFT	69
304030-02	NWTPH-GX	TFT	77
304030-02	EPA-8021	TFT	75
304030-03	NWTPH-GX	TFT	*
304030-03	EPA-8021	TFT	142
304030-03	NWTPH-DX	C25	129
304030-03	EPA-8260	1,2-DCE-d4	93
304030-04	NWTPH-GX	TFT	*
304030-04	EPA-8021	TFT	*
304030-04	NWTPH-DX	C25	141
304030-04	EPA-8260	1,2-DCE-d4	82
304030-05	NWTPH-GX	TFT	*
304030-05	EPA-8021	TFT	*
304030-05	NWTPH-DX	C25	126
304030-05	EPA-8260	1,2-DCE-d4	363**
304030-05	EPA-8270 SIM	TERPHENYL-d14	74
304030-05 (NAPHTHALENES)	EPA-8270 SIM	TERPHENYL-d14	65
304030-06	NWTPH-GX	TFT	60
304030-06	EPA-8021	TFT	67
304030-06 (MTBE,BENZENE,TOLUENE)	EPA-8021	TFT	71
304030-07	NWTPH-GX	TFT	82
304030-07	EPA-8021	TFT	84
304030-08	NWTPH-GX	TFT	76
304030-08	EPA-8021	TFT	74
304030-09	NWTPH-GX	TFT	71
304030-09	EPA-8021	TFT	66
304030-10	NWTPH-GX	TFT	*
304030-10	EPA-8021	TFT	*
304030-10	NWTPH-DX	C25	103
304030-10	EPA-8260	1,2-DCE-d4	76

\* SURROGATE DILUTED OUT OF CALIBRATION RANGE

\*\* SURROGATE OUTSIDE OF CONTROL LIMITS OF 70-120% DUE TO MATRIX INTERFERENCE

APPROVED BY: 

**CERTIFICATE OF ANALYSIS**

CLIENT: ADEPT GEOSCIENCE & ENV  
P.O. BOX 1328  
EVERETT, WA 98206

DATE: 4/29/03  
CCIL JOB #: 304037

DATE RECEIVED: 4/11/03  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 3.209

**REPORT AMENDED TO INCLUDE ADDITIONAL PARAMETERS**
**QUALITY CONTROL RESULTS**
**SURROGATE RECOVERY**

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
304037-01	NWTPH-GX	TFT	80
304037-01	EPA-8021	TFT	83
304037-02	NWTPH-GX	TFT	71
304037-02	EPA-8021	TFT	74
304037-03	NWTPH-GX	TFT	*
304037-03	EPA-8021	TFT	121
304037-03	NWTPH-DX	C25	101
304037-03	EPA-8260	1,2-DCE-d4	99
304037-04	NWTPH-GX	TFT	85
304037-04	EPA-8021	TFT	87
304037-05	NWTPH-GX	TFT	63
304037-05	EPA-8021	TFT	65
304037-06	NWTPH-GX	TFT	*
304037-06	EPA-8021	TFT	*
304037-06	NWTPH-DX	C25	99
304037-06	EPA-8260	1,2-DCE-d4	82
304037-06	EPA-8270 SIM	TERPHENYL-d14	93
304037-06 1-METHYLNAPHTHALENE, 2-METHYLNAPHTHALENE	EPA-8270 SIM	TERPHENYL-d14	94
304037-07	NWTPH-GX	TFT	69
304037-07	EPA-8021	TFT	72
304037-07	NWTPH-DX	C25	81
304037-08	NWTPH-GX	TFT	*
304037-08	EPA-8021	TFT	115
304037-08	NWTPH-DX	C25	116
304037-08	EPA-8260	1,2-DCE-d4	73
304037-08	EPA-8270 SIM	TERPHENYL-d14	68
304037-08 1-METHYLNAPHTHALENE, 2-METHYLNAPHTHALENE	EPA-8270 SIM	TERPHENYL-d14	77
304037-09	NWTPH-GX	TFT	85
304037-09	EPA-8021	TFT	86

\* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: 



**Release of Liability/Certificate of Disposal**

**BBK Trucking LLC** is released from liability for all petroleum contaminated soil originating from:

**5<sup>th</sup> & Martin  
LaConner, Washington**

and transported to:

**Rinker Materials, Northwest Division.  
6300 Glenwood Ave.  
Everett WA 98203**

On April 10<sup>th</sup>, 2003

**A total of 127.23 tons of petroleum contaminated soil were transported to the above facility. The material was treated and disposed of in the following manner:**

**Thermal Desorption/Landfill for Reclamation**

**Treatment/Disposal of the contaminated soil was performed in accordance with all applicable federal, state, and local laws and regulations.**

Signed:

Date: June 3, 2003

A handwritten signature in black ink that reads "Diana M. Hutchings". The signature is fluid and cursive, with "Diana M." on the top line and "Hutchings" on the bottom line.

Diana M. Hutchings

**Inside Sales Representative  
Soil Remediation Division**